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AUTHOR Stoycheva, Katya  
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## ABSTRACT

This series of studies focused on Bulgarian school effects on children's creative development. The studies were based on the premise that one of the most powerful ways in which a culture encourages or discourages creativity is the way in which teachers and the school reward or punish certain personality characteristics as they develop in children and manifest themselves in children's behavior. Study 1 investigated the personality traits of gifted secondary students with outstanding achievements in academic fields, high levels of performance in creative activities, and acknowledged success in arts. Findings indicated that gifted students have self-perceptions, values, and motivations that differ from other students and that may cause problems in their search for peer acceptance. Study 2 examined how Bulgarian teachers perceive and describe the "ideal" pupil. Findings indicated that teachers tended to devalue independence in judgments and being emotional, two traits often associated with high creative potential. Study 3 examined teachers' free descriptions of children's behavior in order to determine the characteristics they find most relevant for work in school; findings showed that creativity-related traits ranked very low. Study 4 compared teachers' evaluations of students' creativity to students' scores on creativity measures; disparities were found. Findings of the studies were used to create an instrument for teachers' evaluation of children's creative behavior in primary school. Using this instrument, 100 pupils (50 boys and 50 girls) from second and third grade were evaluated by their teachers (n=4). Teachers' perception of creativity was centered around its intellectual aspects and problem-solving processes. Boys were significantly nominated more often than girls as being creative. Investigators found primary teachers reluctant to nominate whatever child as non-original. Both under- and over-estimation of creativity hinder teachers' evaluative behavior and attitudes. (Contains 11 references.) (EV)

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## THE SCHOOL - A PLACE FOR CHILDREN'S CREATIVITY ?

Katya Stoycheva

Institute of Psychology, Bulgarian Academy of Sciences  
Sofia, Bulgaria

### *Abstract*

This paper will discuss children's creativity as a special kind of giftedness and as a prerequisite for full development of children's potentialities. It will especially focus on school effects on children's creative development. It is assumed that one of the most powerful ways in which a culture encourages or discourages creativity is the way by which teachers and the school reward or punish certain personality characteristics as they develop in children and manifest themselves in children's behaviour.

This presentation summarises the experience the author has in studying children's creative thinking abilities and teachers' attitudes towards children's creativity in the Bulgarian educational and cultural context. The empirical data to be examined come from research concerned with 1) self-concept, motivation and values of secondary students with outstanding achievements in the arts and sciences; 2) development and evaluation of children's creative abilities as they are measured by Torrance Tests of Creative Thinking; 3) teachers' perception of the Ideal Pupil and its relation to creative personality traits. Conclusions will be drawn with respect to the following questions: What aspects of children's creativity are supported and what is neglected in the regular classroom setting? What kind of creative abilities are to be most easily misidentified? How teachers' lay conceptions of creativity influence children's creative behaviour?

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## BEING CREATIVE AT SCHOOL - DOES IT HELP OR HINDER?

*Study 1* investigates the personality of 16 - 18 aged secondary students with outstanding achievements in academic fields, high level performance in creative activities and acknowledged success in arts (N=107, 45 boys and 62 girls). Gifted students were compared with a control group of 50 boys and 67 girls of the same age group who haven't realised such achievements.

To all subjects were given: 1) Questionnaire for measuring need for achievement, constructed and standardised by Paspalanov and Stetinski (Paspalanov, 1984); 2) Self - Concept Scale developed by Paspalanov (1983) and modified by Stoycheva and Zhelyazkova (1992); the scale yields scores for Real Self-esteem, Ideal Self-esteem and Self-acceptance understood as a discrepancy between Real and Ideal selves; 3) Bulgarian adaptation of Eysenck's Personality Questionnaire (Paspalanov, Stetinski & Eysenck, 1984); 4) Rokeach's measure of values in its adaptation by Yadov (1975).

Gifted students we studied:

- \* have higher need for achievement and higher self-esteem;
- \* achievement orientation, intellectual values and interests and task commitment dominate their self-concept;
- \* both see themselves as more creative and innovative and give higher value to creativity as a life goal;
- \* acknowledge the value of personal autonomy and independence, but also exhibit more stronger dependence on adults' norms and evaluative standards;
- \* greatest differences between their Real and Ideal selves are related to characteristics of sociability and making friends - that is what they think they lack mostly.

Gifted students have self-perceptions, values and motivations that differ them from others boys and girls. Due to these differences, they often have

problems in their search for peer acceptance. In the age of adolescence being different may negatively influence one's self-evaluation and the sense of personal worth (Stoycheva, 1993). There are some research evidence supporting this conclusion:

1. Gifted students do not enjoy greater self-acceptance and self-confidence, although they have positive self-concept and higher self-esteem. This is particularly true for girls who estimate themselves as less beautiful and less attractive than the other girls do;
2. In the experimental group only, extroversion is positively influencing the self-acceptance and neuroticism is lowering both self-esteem and self-acceptance (these relationships are not significant in the control group). Gifted introverts and those who are emotionally unstable have greatest problems in their adaptation to school and to peer group expectations. To put it in another way - emotionally stable, extroverted gifted students dispose of personality resources that help them to counteract "the creativity deviance" and to live in a greater harmony with others and themselves.
3. One striking individual case: a boy that has been selected for participation in the experimental group for his achievements in technical sciences three years later has been nominated by his classroom teacher as being a "problem student". The teacher described him as a "very conscientious, in-depth and thorough learner, not like others, who is not accepted in the group, is almost completely isolated from his peers and tends to withdraw".

## IS THE IDEAL PUPIL A CREATIVE PUPIL?

It is assumed that one of the most powerful ways in which a culture encourages or discourages creativity is the way teachers reward or punish creativity - relevant behaviours and personality characteristics in children. *Study 2* examines how Bulgarian teachers perceive and describe the ideal pupil - "the kind of person you would like to see children you teach become". Do teachers support and stimulate characteristics that enable the realisation of children's creative potential ?

The Ideal Pupil Checklist designed by Torrance (1965) was administered to 343 persons from all over the country, whose teaching experience ranges from less than one year to 38 years. 88% of the sample were women; 165 were primary teachers, 81 worked at elementary level, 31 - in a high school and 52 other subjects (instructors of out-of-school activities, school psychologists, educational advisors, etc.)

The Ideal Pupil Checklist consists of 60 characteristics that have been found through empirical studies to differentiate some group or groups of highly creative people from a similar group of less creative people ("healthy" and "physically strong" are added for reference purposes). Teachers are asked to indicate on a 4-point scale whether and to what extent they encourage or discourage these characteristics.

1. The most favoured characteristics among Bulgarian teachers are: sincere, curious, thorough, healthy, persistent, sense of beauty, sense of humour, independent in thinking.
2. Bulgarian teachers systematically reject a pattern of characteristics related to emotional withdrawal or self-sufficiency: bashful; haughty, self-satisfied; timid;

sophisticated; quit; obedient; fault-finding. These characteristics are considered to be important by none or less than 1% of the subjects and are labelled as undesirable by up to 80 % of teachers' population.

3. At the same time, both research and observations have show that unusual emotional sensitivity as well as unusual strength of the Self are often concomitants of high creative potential. Teachers' negative attitudes towards these personality characteristics may cause the non-acceptance and misidentification of highly creative children having such traits.

4. It is interesting to notice that "independent in judgements" scored significantly lower than "independent in thinking". Intellectual activity is valued and good thinkers are identified and encouraged in the field of academic learning and achievements. Independence, however, is no more an assets when applied to social interactions and evaluative behaviours. Independence is an intellectual value, but not a social one when children are concerned. Adults are expected to dominate social life organisation and to direct students' adaptation to in-school and out-of-school environment. A belief that has strong negative impact 1) on the social development of intellectually gifted children, and 2) in the identification and recognition of leadership abilities.

5. It is interesting to notice that "being emotional" is systematically perceived as a negative rather than a positive aspect of students' personality. May be it is considered as immature or this is just because emotionally reactive children are more likely to create problems and disturb the so-important discipline in the classroom? That is how creative potentialities of emotionally sensitive individuals may be unduly overlooked and neglected in our school context.

## IS CREATIVITY IMPORTANT: TEACHERS' POINT OF VIEW

*Study 3* examines how teachers perceive and describe real pupils they work with at school. Pupils tend to learn and develop traits and behaviours they find rewarding. We analysed teachers' free descriptions of children's behaviour in search of the characteristics they find most relevant (important) for their work in school (Stoycheva, 1990).

45 6th grade teachers from 3 public secondary schools in Sofia were involved in the study. They were presented with an experimental case that samples one typical school situation: "Let's imagine that a new colleague has come to your school and will teach the same classes as you do. How will you describe him his new students? What can you say about the children to get acquainted your colleague with the specific atmosphere of each class?"

1. 13 subjects (29%) did not return their research forms: they claimed they don't know well enough the children because they have had only few hours with them (not enough time). Other teachers also referred to the idea that more time you spent with pupils better you get knowing them. This predominantly re-active approach to understanding children's personality certainly prevent them from knowing more about their creative potentialities and how do they develop in school.

2. Data had shown that teachers consider creativity to be not among the most important students' characteristics. Few of them mention creativity-relevant traits or behaviours: to have original ideas ranked 25th from 61 items; a climate for creative work - 37th; search for novelty, interested in the unknown & showing creative preferences - 49th; to do very well in uncommon situations - 61st.

3. Also, teachers consider creativity to be not as relevant to achievement in school as intelligence is (ranked 5th, respectively.) It should be mentioned however that in the 6th graders these teachers work with (N=407) significant positive correlations have been found between school marks and both intelligence and creative thinking abilities like fluency, flexibility and originality. Creative thinking in fact contributes to children's academic achievements, but teachers fail to recognise creativity's impact for effective learning and teaching. This lack of understanding makes teachers rather insensitive to the variety of creative manifestations in their children.

### CAN TEACHERS IDENTIFY CREATIVE THINKERS?

*Study 4* focused on teachers' evaluation of students' creative potentialities.

Teacher Nomination Form developed by Torrance (1974) has been used. Teachers are asked to name those children in their class who are 1) most fluent, most flexible, most original and, respectively, 2) least fluent, least flexible, least original in their thinking and the production of ideas.

Three different samples have been tested in order to examine the relationship between teachers' evaluations of students' creative abilities and students' creativity tests scores. *The first group* consisted of 32 6th grade teachers and their pupils (N=407). Students were given Product Improvement, Unusual uses and Just Imagine tasks from Verbal Form A of the Torrance Tests of Creative Thinking (TTCT), adapted for use with Bulgarian population by Stoycheva (Stoycheva, 1988). *The second group* was made up of 7 primary teachers and 132 students from grades 1st to 3rd in a highly selective public secondary school in Sofia. Children were given Figural Form B of the Torrance Tests of Creative Thinking (Stoycheva, 1990) as a creativity measure. *The third*



*sample* involved 4 primary teachers and 100 children from grades 2nd and 3rd in a public secondary school in Sofia. Creativity measures were provided by Figural Form B of the TTCT and by the three above mentioned verbal tasks that have been used in the first group as well.

1. Our results conform to previous research work with respect to the finding that teachers at all educational levels tend to globalise their judgements, i.e. usually the same children are nominated as being most fluent, most flexible and most original in their thinking (the same is true for the group of least fluent, least flexible and least original).

2. 6th graders nominated by teachers as most/least fluent and flexible in their thinking have been differentiated by appropriate scores on the tests of creative thinking. With respect to originality, no relation was found between teachers' judgements and students' test scores. Might be that teachers' conception for originality differ from what creativity tests measure; it is also possible that schoolwork offers few opportunities for teachers to observe and appreciate children's originality. Whatever the explanation is, this result indicates that the capacity for production of original, unusual ideas can be easily misidentified in elementary school.

3. Further analyses showed that 6th grade teachers can well differentiate low creative from average students, but they can't correctly identify the highly creative boys and girls in a group of students with moderate level of abilities. Teachers' judgements of creativity are more reliable when applying to a group than to an individual student.

4. In a primary school no relationship was found between tests fluency and flexibility and teachers' evaluations for these abilities. With respect to originality, controversial findings were obtained: a) highly original pupils as identified by tests scores receive significantly more nominations for originality than their peers from the teachers in the specialised, selective school; b) primary teachers in the regular school (Sample No 3) were able to differentiate neither on originality nor on fluency and flexibility in thinking. The latest finding suggests the possibility for a more optimistic conclusion: school programs that emphasise the development of children's creativity improve teachers' possibilities to identify original thinkers.

## **TEACHERS EVALUATION OF CHILDREN'S CREATIVE BEHAVIOUR**

The research work described here was mainly motivated by our dissatisfaction with the low reliability of Torrance (1974) Teacher Nomination Form in primary school. The development of an instrument for teacher's evaluation of children's creative behaviour in primary school began with interviewing experts (36 primary teachers) about what they consider as creative behaviour in young children. The second open-ended question asked them to describe an example of original, creative thinking they have observed in their classroom during the last school year.

The answers were content analysed and categorised. They served to create a pool of items describing different kind of creative behaviours that can be identified and observed in primary school pupils. Wording that is maximally close to the language of the teachers has been used in order to preserve the ecological validity of the scale. 33 items have been formulated and the nomination format

has been chosen for the scale - for each one of these items the teacher is asked to give the names of the students who, according to his/her opinion, have exhibit such behaviour.

100 pupils from grades 2nd and 3rd (50 boys and 50 girls) were evaluated by their teachers (N=4) using this new instrument. Teachers' nominations were later scored as a dichotomous rating for the child.

1. Cronbach Alpha-analysis indicated a rather homogeneous scale - 0.76. Some of the indicators however only slightly correlate with the total score (less than 0.20). After the elimination of the least unreliable items a 22-item scale with Alpha - Cronbach of 0.81 was derived and used in further analyses. Teachers' perception of creativity is centered, once again, around its intellectual aspects and problem-solving processes: "has interesting, uncommon ideas", "shows great curiosity and interest in things others are not interested in", "quickly understand real-life problem situation and suggests nontrivial, but effective solutions" have highest correlations with the total score.

2. Boys are significantly more often nominated as creative than girls in both grades 2nd and 3rd. At the same time, there is no significant sex differences on any of the test indicators of creativity except "resistance to premature closure" - 3rd grade boys overscore their female classmates. Primary teachers' conception of creativity is less sensible to girls' performance and creative achievements.

3. Teachers' evaluations of children's creative behaviour are significantly related to only one test indicator for creativity - elaboration. Torrance (1974) also has noticed that the image most teachers have of "the creative pupil" is that of the good elaborator, the pupil who embroiders ideas and make them "fancy".

4. This study illuminated an interesting point that remained unnoticed till now. We found primary teachers reluctant to nominate whatever child as non-original. One of them put it as follows: "All children are creative and can think originally. A teacher who understands and stimulates children's potentialities may help their creativity blossom and develop." Quite paradoxically, the great value assigned to children's creativity and its development acts as a block to teachers' capacities to identify and evaluate original thinking. "If all children can think creatively, how can I say that some of them are non-original in their ideas?" Both under- and over-estimation of creativity hinder teachers' evaluative behaviour and attitudes.

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Mailing address:

Katya Stoycheva  
21, Elin Vrah St.  
bl. 66, vh.2, ap. 20  
Sofia 1407, Bulgaria

E-mail: KATYA@BGEARN.ACAD.BG

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Signature:

Printed Name: Katya Stoycheva

Position/Title: Research Fellow, Ph. D.

Organization: Institute of Psychology, Bulgarian Academy of Sciences

Address: (h) 21, Elin Vrah St., bl.66 vh.2 ap.20, Sofia 1407, Bulgaria

Telephone Number: (+ 359 2) 62 25 58

FAX: none

E-mail address: [katya@bgearn.acad.bg](mailto:katya@bgearn.acad.bg)

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